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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,859	06/21/2006	Shuzo Fujiwara	SANK.0009	8591

38327 7590 05/29/2008  
REED SMITH LLP  
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EXAMINER
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DAVID, MICHAEL D

ART UNIT	PAPER NUMBER
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3641

MAIL DATE	DELIVERY MODE
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05/29/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/583,859	<b>Applicant(s)</b> FUJIWARA ET AL.	
	<b>Examiner</b> MICHAEL D. DAVID	<b>Art Unit</b> 3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/30/2006 and 6/21/2006</u> .                                 | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The information disclosure statements (IDS) submitted on 6/21/2006 and 8/30/2006 have been considered by the examiner.

### ***Specification***

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: blasting method for neutralizing a chemical weapon.

The disclosure is objected to because of the following informalities: in par. 3 it appears that "processing an containing" should be replaced by "processing and containing", in par. 5 it appears "from" should be replaced by "for", in par. 28 it appears "attitude-controlling" should be replaced by "altitude-controlling" (1 instance on pg. 7 and 2 more instances on pg. 8), in par. 28 it appears "loaded an airplane" should be replaced by "loaded on an airplane". Examiner notes that this is not an exhaustive list and it is suggested that the applicant carefully review entire application to make appropriate corrections.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-2, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admission of prior art (AAPA).

Regarding claim 1, AAPA discloses a blasting method of blasting an explosive device at least containing an explosive and a chemical agent in a sealed pressure vessel (par. 3 in "background art" section), comprising: evacuating the pressure vessel into a reduced-pressure or vacuum state (under vacuum – par. 5); enclosing such a particular amount of oxygen that the pressure in the pressure vessel after blasting becomes lower than the pressure outside the pressure vessel (par. 5); and blasting the explosive device therein (par. 5). With the 2 blasting methods/embodiments described in paragraphs 3-5, AAPA does not explicitly disclose enclosing such a particular amount of oxygen that the oxygen balance in the pressure vessel becomes positive. However, AAPA teaches that it is known in the art to enclose a particular amount of oxygen in an

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explosive such that the oxygen balance in the pressure vessel becomes positive (oxygen balance positive – par. 2) in order to minimize soot generation. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the blasting methods taught by AAPA in paragraphs 3-5 with the teaching of enclosing a particular amount of oxygen such that the oxygen balance in the pressure vessel becomes positive (par. 2) in order to minimize soot generation.

Regarding claim 2, AAPA further discloses the blasting method according to claim 1, wherein the particular amount of oxygen is supplied as oxygen gas (oxygen is supplied from air – par. 6).

Regarding claim 4, AAPA discloses the blasting method according to claim 1, except for wherein the particular amount of oxygen is an amount of oxygen gas at which the oxygen gas pressure, as calculated as oxygen gas, becomes equivalent to 15% to 30% of the atmospheric pressure at normal temperature. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide that particular amount of oxygen (15-30% of the atmospheric pressure), since this would prevent the generation of soot after blasting and since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Ito (US Patent Application Publication No. 2002/0011172 A1).

Applicant's own admission of prior art discloses the blasting method of claim 1 as set forth above in rejection of claim 1. AAPA does not explicitly disclose wherein part or

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all of the particular amount of oxygen is supplied as an oxygen-containing alkali metal or alkali-earth metal compound. Ito teaches, within the same field of endeavor (dismantling of chemical weapons), that it is "known that liquid chemical agents, such as mustard and lewisite, used in chemical bombs can be made harmless by neutralizing them with an alkaline solution, such as ammonia and sodium hydroxide" (par. 6). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method disclosed by AAPA with the principle of using alkaline solutions taught by Ito in order to provide a way to neutralize the chemical agents.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art of record discloses various methods of dismantling chemical weapons.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael D. David whose telephone number is 571-270-3737. The examiner can normally be reached on Monday-Friday, 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571-272-6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MDD/  
5/22/2008

/Michael J. Carone/  
Supervisory Patent Examiner,  
Art Unit 3641